

Unit 7: Measurement

In this unit students will:

- Tell and write time to the nearest minute and measure time intervals in minutes.
 - Solve elapsed time, including word problems, by using a number line diagram.
 - Reason about the units of mass and volume.
 - o Understand that larger units can be subdivided into equivalent units (partition).
 - o Understand that the same unit can be repeated to determine the measure (iteration).
 - o Understand the relationship between the size of a unit and the number of units needed (compensatory principle).
 - Demonstrate a thorough understanding of area and solve real world and mathematical problems that relate to area.
 - o Explore the concept of covering a region with “unit squares,”
 - o Counting the square units to find the area could be done in metric, customary, or non-standard square units.
 - o Tiling rectangles, then multiplying side lengths to show the answer is the same.
 - Find the perimeter of polygons; use addition to find perimeters; solve for an unknown length and recognize the patterns that exist when finding the sum of the lengths and widths of rectangles.
 - Graph data that is relevant to their lives. While exploring data concepts, students should **P**ose a question, **C**ollect data, **A**nalyze data, and **I**nterpret data (PCAI).
- Mathematically proficient students communicate clearly by engaging in discussion about their reasoning, using appropriate mathematical language. Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same size square units required to cover the shape without gaps or overlaps. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.

*adapted from Georgia Department of Education